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- (71) Applicants (for all designated States except US): **THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US];** National Institutes of Health, Office of Technology Transfer, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852-3804 (US). **CHIBA UNIVERSITY [JP/JP];** 1-8-1, Inohana, Chuo Ku, Chiba-shi, Chiba 260-8670 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MOSS, Joel [US/US];** 8200 Wisconsin Avenue, Apt. #610, Bethesda, MD 20814 (US). **NODA, Masatoshi [JP/JP];** 3-6-14, Utsukushigaoka, Yotsukaide, 284-0045 (JP).
- (74) Agent: **SIEGEL, Susan, Alpert; Klarquist, Sparkman, LLP,** One World Trade Center, Suite 1600, 121 SW Salmon Street, Portland, OR 97204 (US).
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(54) Title: **FACTORS THAT BIND INTESTINAL TOXINS**

(57) Abstract: Methods for neutralizing bacterial toxins such as Shiga toxins and cholera toxins are disclosed. In a particular embodiment, a method is provided for treating a subject suffering from an infection caused by an Stx-producing organism by administering a therapeutically effective amount of a hop bract tannin obtained from *Humulus lupulus*. Also provided are methods for isolating polyphenolic compounds that bind Stx molecules, and methods for detecting the presence of Stx molecules in a biological sample. In a disclosed embodiment, a subject infected with a Shiga toxin-producing *E. coli* strain is treated by enterically administering a high molecular weight fraction of hop bract extract to the subject.